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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
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| 10/697,945 | 10/31/2003 | Emlyn Jones | 84710/3157 KAW | 8934 | |
| 20736 7 | 590 10/31/2005 | | EXAM | EXAMINER | |
| MANELLI DENISON & SELTER | | | COLLINS, TIMOTHY D | | |
| 2000 M STREET NW SUITE 700 WASHINGTON, DC 20036-3307 | | | | | |
| | | | ART UNIT | PAPER NUMBER | |
| | • | | 3643 | | |

DATE MAILED: 10/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | |
|--|--|--|--------------|--|--|--|
| | | 10/697,945 | JONES ET AL. | | | |
| | Office Action Summary | Examiner | Art Unit | | | |
| | | Timothy D. Collins | 3643 | | | |
| | The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) ⊠ Responsive to communication(s) filed on 22 August 2005. 2a) ⊠ This action is FINAL. 2b) ☐ This action is non-final. 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Dispositi | on of Claims | | | | | |
| 5)□ 6)⋈ 7)□ 8)□ Applicati 9)□ 10)⋈ | Claim(s) 1-4 and 6-10 is/are pending in the apple 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) 1-4 and 6-10 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or on Papers The specification is objected to by the Examine The drawing(s) filed on 22 August 2005 is/are: | vn from consideration. r election requirement. r. a)⊠ accepted or b)⊡ objected t | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority u | nder 35 U.S.C. § 119 | | | | | |
| 12) ⚠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☒ All b) ☐ Some * c) ☐ None of: 1. ☒ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| 2) Notic 3) Inform | t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail Do 5) Notice of Informal F 6) Other: | | | | |

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DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in the UK on 6/02/03 and 7/7/03.

Drawings

2. The changes to the drawing are accepted.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by applicants own admitted prior art of at least figure 1.
 - a. Re claim 1, The figure shows the claimed structure and is considered prior art because of the description of the figure 1 in the specification calling it a "prior art nacelle surrounding a conventional fan gas turbine engine".
 - b. Re claim 2, if the term "integral" does not mean one piece which is not releasable then this claim reads directly on the prior art as disclosed by the

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applicant because the fan casing is "integral" to the intake even though it is in a separate piece. Note: this claim is treated as such because of the confusion that claim 5 brings in.

- 5. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by USPN 6227485 to Porte (hereinafter called 485).
 - c. Re claim 1, 485 discloses an engine (7) which inherently has accessories because the engine must have hydraulics and pumps for fuel as well as electric relays and controls which are all considered accessories which are mounted to the fan casing and core engine. Also 485 discloses that the nacelle (as seen in figure 1 as the entire surrounding object around the engine) comprises an intake (3) and thrust reverser unit (5) which is formed of 2 c-shaped openable portions as seen in at least column 3 at lines 1-15. The thrust reverser unit being openable to access the accessories as seen in figure 1 at least.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

⁽a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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7. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over 485 as seen above in claim 1 and further in view of USPN 4585189 to Buxton (hereinafter called 189).

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- d. Re claim 2, 485 may not disclose that the nacelle comprises a fan containment casing that is integral with the intake, however 189 teaches of this as can be seen in figure 1. This can be seen in that the fan containment casing of an engine is found aft of the propulsive fan and above the main compressor blades (as is taught by the applicants "prior art" figure and admissions through this figure), also the intake is the portion of the engine nacelle structure that is upstream of the propulsive fan and therefore it can be seen in the figure of 189 that the fan containment casing is integral with the intake. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied the teachings of 189 into the device of 485 so as to allow for a decrease in the number of pieces to the nacelle for ease of maintenance and to allow for space savings in parts warehouses and on board aircraft carriers for Navy aircraft. Note: this combination would give an engine with a nacelle which has the front part of 189 and the thrust reverser section of 485.
- e. Re claim 3, 485 as modified in claim 2 discloses that the intake comprises an acoustic panel that extends between a downstream edge of the fan containment casing and a leading edge of the intake. This is seen in that the figure 1 of 189 shows in a dotted line above toward the top of the nacelle interior a panel of the nacelle. This panel is inherently made of some material. All

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materials inherently deaden some sound or redirect some sound. Therefore the material of this surface as seen in 189 will be an "acoustic panel" which reduces engine-generated noise in some direction. Most likely this panel will reduce the noise in the direction to the sides of the engine, because the noise will be channeled out the front of the engine. Note: it is suggested that the applicant claim how much noise is reduced and from what base line this reduction takes place. Also note that no reference was given and therefore a "reduction" can be almost anything and in any direction. Also no definition of acoustic panel has been given and therefore a broad definition has been used.

f. Re claim 4, 485 as modified may not specifically disclose that the fan containment casing is disposed outside of a fire zone, however it is old and well known in the art that there are multiple separate fire zones on an aircraft engine. These zones are merely regions that must be kept free of leaking flammable materials and must also be maintained at a cooler temperature. Therefore it would have been obvious to one of ordinary skill in the art to place the fan containment casing of the device as modified outside of at least one fire zone of the nacelle because it is located with the inlet and not attached to the rear section of the nacelle where most fire zones are located. This would be done because it is old and well known in the art that engine accessories which must be placed in fire zones are located close to the engine where they will be needed and the inlet is not one of these places, because the combustion and hydraulics and fuel pumps of the engine are located near the middle of the engine and not

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in front of the compressors of the engine. Therefore at least one fire zone would be located near the middle of the engine toward the rear and this would be separated from the front section of the nacelle because it is split as seen in 485 as modified. Note: the fan containment casing may be in a fire zone, however it is not in at least one, therefore this reading meets the limits of the claim, in other words there will be at least one "other" fire zone in the nacelle.

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- 8. Claims 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over 485 as applied to claims 1-5 above, and further in view of USPN 6334730 to Porte (hereinafter called 730).
 - g. Re claims 6 and 7, 485 as modified may not specifically disclose an access panel radially outward of the fan containment casing in the C- shaped portions, however figure 2 of 730 teaches of this (approximately above number 18, a small door is seen with hinges and latches). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included an access panel in the device of 485 as modified so as to allow for access to accessories while the main access doors are closed. This would be done to allow for fast access to common parts as is also done in the other fields such as the gas door of a car, and the oil hatch on the cowling of a Cessna 172.
 - h. Re claim 8, 485 as modified above in claims 6-7, discloses the access door being pivotably attached to the C-shaped portions. Also the statement "and is openable only when the C-shaped portions are closed" is a recitation of

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the door of the art as modified is capable of being openable only when the C-shaped portions are closed because this can be done manually in that the operator can choose to only open it when the C-shaped portions are closed.

i. Re claims 9 and 10, 485 as modified above discloses that the doors are attached "near" a horizontal line, and also in a "near" vertical position when open, at least for the reason that the term "near" is relative. The term "near" has not been defined so as to limit what must be taken as being "near". Some frame of reference and size comparisons or distances and angles must be supplied to take any meaningful view of the term "near" in the claims. It is suggested that the applicant define "near" and positively recite how "near" parts of the device are to other parts of the device.

Response to Arguments

- 9. Applicant's arguments filed 8/22/05 have been fully considered but they are not persuasive.
 - a. Re applicant's argument that the cowl doors of the device are separate and in addition to the thrust reverser C-shaped doors is more specific than the claim language used. The applicant's claims do not claim that there are more doors, just that there are c-shaped doors that make up the thrust reverser, which is clearly seen in the prior art as applied above.

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b. Re applicant's argument that 485 does not disclose a single cover or thrust reverser unit. The examiner maintains that the applicant has not claimed a "single cover" and it appears the applicant is again arguing a more specific limitation than that which has been claimed.

- c. Re applicant's argument that 485 discloses a turbine cover and reverser cover which are locked together and must be unlocked to achieve access and presents complications to access. The examiner maintains that the applicant's claims do not preclude these things from being present.
- d. Re applicant's argument that there is no "acoustic panel" shown in the documents. The examiner maintains that there has not been any definition of the terms "acoustic panel" and therefore a broad one may be used by the examiner. In this case any structure which provides some effect on sound or sound energy is an "acoustic panel" and therefore since it is inherent that the device of the prior art will provide some sound damping or some sound deflection the prior art meets this limitation. It is once again suggested that the applicant provide further details of the acoustic nature of the panel in the claims.
- e. Also it is noted that the applicant admits that fire zones are well known in the response page 6.

Conclusion

10. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy D. Collins whose telephone number is 571-272-6886. The examiner can normally be reached on M-F, 7:00-3:00, with every other Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on 571-272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Timothy D. Collins
Patent Examiner
Art Unit 3643

Peter M. Poon Supervisory Patent Examiner Technology Center 3600

10/27/05